

IN THE CLAIMS:

Please cancel claims 1-33 and 35 without prejudice to filing one or more divisional applications. Please amend claim 34 as follows. Please add new claims 36-42.

Claims 1-33 are cancelled.

34. (Presently Amended) A method of preparing a Coleopteran-resistant transgenic plant, comprising the steps of:

(a) obtaining a nucleic acid segment comprising a gene encoding a modified Cry3Bb* polypeptide, wherein:

said polypeptide comprises one or more point mutations in or near α helix 4, wherein said one or more point mutations result in at least one amino acid substitution selected from the group consisting of Leu158 to Arg, Ser160 to Asn, Lys161 to Pro, Pro162 to His, Asp165 to Gly, Lys189 to Gly; and

~~wherein said gene is operably linked to a promoter;~~

~~(b) — introducing said nucleic acid segment into a vector;~~

~~(c)~~ (b) transforming a plant cell with said nucleic acid segment ~~vector~~; and

~~(d)~~ (c) regenerating from said plant cell a transgenic plant, which expresses said modified Cry3Bb* polypeptide and wherein said transgenic plant is resistant to Coleopteran insects as compared to a non-transformed plant.

(d) and wherein the transgenic plant is resistant to corn rootworm insects as compared to a non-transformed plant.

35. (Cancelled).

36. (New) The method of claim 34, wherein step a) further comprises operatively linking the gene to a promoter, and introducing said nucleic acid segment into a vector, and wherein step b) comprises transforming a plant cell with said vector.

37. (New) The method of claim 34, wherein said gene encodes a modified Cry3Bb* polypeptide wherein the polypeptide further comprises the amino acid substitutions His231 to Arg, Ser311 to Leu, Asn313 to Thr, Glu317 to Lys, and Gln348 to Arg.

38. (New) A method of reducing insect infestations comprising introducing into a plant a gene encoding a modified Cry3Bb* polypeptide, wherein said polypeptide is expressed in an insecticidally effective amount, and wherein said polypeptide comprises one or more point mutations in or near α helix 4, wherein said one or more point mutations result in at least one amino acid substitution selected from the group consisting of Leu158 to Arg, Ser160 to Asn, Lys161 to Pro, Pro162 to His, Asp165 to Gly, and Lys189 to Gly,

and wherein said modified Cry3Bb* polypeptide further comprises the amino acid substitutions His231 to Arg, Ser311 to Leu, Asn313 to Thr, Glu317 to Lys, and Gln348 to Arg.

39. (New) A method of preparing a Coleopteran-resistant plant seed comprising the steps of:

(a) transforming a plant cell with a nucleic acid segment comprising a gene encoding a modified Cry3Bb* polypeptide wherein:

said polypeptide comprises one or more point mutations in or near α helix 4, and wherein said one or more point mutations result in at least one amino acid substitution selected from the group consisting of Leu158 to Arg, Ser160 to Asn, Lys161 to Pro, Pro162 to His, Asp165 to Gly, Lys189 to Gly, to produce a transformed plant cell;

- (b) producing a transgenic plant from said transformed plant cell; and
- (c) obtaining a Coleopteran-resistant seed from said transgenic plant, wherein said plant seed exhibits increased Coleopteran-resistance as compared to a non-transformed seed;

and wherein said modified Cry3Bb* polypeptide further comprises the amino acid substitutions His231 to Arg, Ser311 to Leu, Asn313 to Thr, Glu317 to Lys, and Gln348 to Arg.

- 40. (New) A transgenic plant comprising a gene encoding a modified Cry3Bb* polypeptide, wherein said modified polypeptide further comprises amino acid substitutions His231 to Arg, Ser311 to Leu, Asn313 to Thr, Glu317 to Lys, and Gln348 to Arg.
- 41. (New) A progeny plant or seed from the transgenic plant of claim 40, wherein said progeny plant or seed comprises a gene encoding a modified Cry3Bb* polypeptide.
- 42. (New) A seed from the progeny plant of claim 41, wherein said seed comprises a gene encoding a modified Cry3Bb* polypeptide.
- 43. (New) A plant from the seed of claim 41 or 42, wherein said plant comprises a gene encoding a modified Cry3Bb* polypeptide.